CW#89: Right Triangle Problems

Geometry

Classroom Copy- DO NOT WRITE ON!

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| Objective | * You will be able to determine what strategy to use to solve a right triangle problem. |
| Criteria for Success | Did you…   * Correctly identify the sides (opposite, adjacent, hypotenuse)? * Use the correct trig ratio? * Analyze your answer: Does it make sense? Did you answer the question completely? |

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| 1. (a)     respectively. Draw & label the triangle.  (b) What is the value of cos∠A? | 1. (a)     (b) What is the length of the hypotenuse? |
| 1. In the figure below, ABCD is a square whose side is 8 units. Find the length of diagonal AC in simplified radical form and to the nearest tenth   http://regentsprep.org/Regents/math/ALGEBRA/AT2/Pracpic8.gif | 1. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr48.gif   http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr49.gif   1. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr50.gif C. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr51.gif 2. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr52.gif D. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr53.gif |
| 1. Find the perimeter of the triangle. Round to the nearest tenth.     A. 37.9 in  B. 57.4 in  C. 137.3 in  D. 161.8 in  E. 186.3 in | 1. In the figure below, ABCD is a rectangle with a perimeter is 30. The length of BE is 12.     http://regentsprep.org/Regents/math/ALGEBRA/AT2/Pracpic5.gif  (a) What is the length of side CE? *(Hint: it’s not 13)* |
| 1. Two vertical poles, one 3 meters tall and the other 5 meters tall, stand a certain distance apart. A line from the top of the shorter pole to the top of the taller pole makes a 15° angle with a horizontal line. Which of the following expresses the horizontal distance, in meters, between the bases of the two poles (rounded to the nearest hundredth)?   A. 0.54  B. -7.46  C. 1.34  D. 0.13  E. 7.46 | 1. You have an extension ladder that you are using to repair a 14-foot chimney with an angle of 75.5°. Which trig ratio could be used to find the length required for the extension ladder to reach the top of the chimney?   A.  B.  C.  D. |
| 1. Circle ALL the statements that apply to this triangle: 2. http://regentsprep.org/Regents/math/ALGEBRA/AT2/Pracpic.gifhttp://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr1.gif 3. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr2.gif 4. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr3.gif 5. http://regentsprep.org/Regents/math/ALGEBRA/AT2/PracTr4.gif | 1. Given the figure below, what is the measure of  x + y? Show your work or explain your answer in the space provided:   http://regentsprep.org/Regents/math/ALGEBRA/AT2/Pracpic7.gif |
| *http://regentsprep.org/Regents/math/ALGEBRA/AT2/Pracpic9.gifChallenge Problem! Solve for x & y, and you can start your homework!* | |